DEPARTMENT OF TRANSPORTATION
DIVISION OF ENGINEERING SERVICES
Office of Structural Materials
Quality Assurance and Source Inspection

Bay Area Branch
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Contract #: 04-0120F4
Cty: SF/ALA Rte: 80 PM: 13.2/13.9
File #: 1.28

WELDING INSPECTION REPORT

Resident Engineer: Casey, William
Address: 333 Burma Road
City: Oakland, CA 94607

Report No: WIR-027092
Date Inspected: 23-Jan-2012

Project Name: SAS Superstructure
Prime Contractor: American Bridge/Fluor Enterprises, a JV
Contractor: American Bridge/Fluor Enterprises, a JV

OSM Arrival Time: 700
OSM Departure Time: 1730
Location: Jobsite

CWI Name:	As noted below			**CWI Present:**	☑ Yes	☐ No	
Inspected CWI report:	☐ Yes	☑ No	☐ N/A	**Rod Oven in Use:**	☑ Yes	☐ No	☐ N/A
Electrode to specification:	☑ Yes	☐ No	☐ N/A	**Weld Procedures Followed:**	☑ Yes	☐ No	☐ N/A
Qualified Welders:	☑ Yes	☐ No	☐ N/A	**Verified Joint Fit-up:**	☑ Yes	☐ No	☐ N/A
Approved Drawings:	☑ Yes	☐ No	☐ N/A	**Approved WPS:**	☑ Yes	☐ No	☐ N/A
				Delayed / Cancelled:	☐ Yes	☑ No	☐ N/A

Bridge No: 34-0006
Component: SAS OBG

Summary of Items Observed:

Quality Assurance Inspector (QA) Douglas Frey was at the American Bridge/Fluor (ABF) job site at Yerba Buena Island in California between the times noted above in order to monitor Quality Control functions and the in process work being performed by ABF personnel. The following items were observed:

13E/14E/E2 (Exterior)

This QA Inspector randomly observed the in process repair welding of ultrasonic rejectable indications on E2 at 13E/14E on the exterior of the OBG. This QA Inspector observed ABF qualified welder Wai Kit Lai (ID 2953) perform the Shielded Metal Arc Welding (SMAW) process in the 4G overhead position utilizing 3.2mm E7018-H4R electrodes secured from a remote baking oven. The welder was observed grinding and blending the welds with a small disc grinder between passes. QC Inspector Fred Von Hoff was observed measuring the inter-pass temperatures with a 93° Tempilstik® as well as monitoring the welding and the parameters. The amperage was recorded as 128 and appeared to be in general conformance with ABF-WPS-D1.5-1001-Repair. The locations for the repairs were y+480mm and y+1200mm. This QA Inspector made subsequent observations at this location and noted that the work was in progress.

12E/13E/D1/D2 UT (Interior)

This QA Inspector performed Ultrasonic Testing (UT) on approximately 10% of the welds located at D1 and D2 of 12E/13E on the interior of the OBG. These welds were previously accepted by QC Ultrasonic technicians in accordance with AWS D1.5-2002, section 6, table 6.3. This QA observed no rejectable indications at the time of

testing. This QA generated a TL-6027 UT report on this date. The completed work observed at this location appeared to be in compliance with the contract specifications.

12E/13E/D1/D2 MT (Interior)

This QA Inspector performed a Magnetic Particle (MT) Inspection of D1 and D2 at 12E/13E on the interior of the OBG. This QA Inspector performed the yoke method in conformance with ASTM E 709 and the standard of acceptance with D1.5 section 6.26. This QA Inspector noted that no rejectable indications were found at the time of testing. This QA Inspector generated a TL-6028 MT report on this date. The completed work at this location appeared to be in general conformance with the contract specifications.

12E/13E/A3 (Interior)

This QA Inspector randomly observed ABF welding operator James Zhen (ID 6001) performing the Flux Core Arc Welding with gas (FCAW-G) process utilizing a “Bug-O” motorized rail system with a magnetic base attached in the (4G) overhead position on the underside of deck plate “A3”, at 12E/13E of the OBG. This QA Inspector observed QC Inspector Fred Von Hoff monitoring the welding to ensure the welding parameters were in compliance pertaining to ABF-WPS-D15-3110-4. The parameters were recorded as (A=260/V=24.7/TS=190/HI=2.02). This QA inspector made subsequent observations throughout the shift to monitor quality and noted that the work was in progress and appeared to be in general conformance to the contract requirements.

FW Spencer Pipe Welding 6W/PP39 (Exterior)

This QA Inspector observed F.W. Spencer welder Damian LLamos ID# 6645 performing SMAW in the 1G flat and 3G vertical positions on 2.5 and 4 inch schedule 80 pipe at the locations listed below. This QA Inspector verified the fit up of the joints and found it to be satisfactory. This QA Inspector observed QC Inspector Steve Jensen monitoring the welding to ensure the welding parameters were in compliance pertaining to WPS-1-12-1 Revision 2 (1.12). The welder was observed implementing E6010 electrodes in the root pass with the balance using E7018 electrodes. This QA Inspector made subsequent observations throughout the shift to monitor quality and noted that the work was completed on this date and appeared to be in general conformance with the contract documents.

20/2.5/39/NW
20/4/39/NW
21/2.5/39/NW
21/4/39/NW
22/2.5/41/NW
22/4/41/NW

Note: The QAI reviewed the observations and inspection with QA Lead Inspector, Daniel Reyes, written in this report. The issues were noted by the QAI and the QA Lead Inspector concurs with the QA report.

Summary of Conversations:

The were no pertinent conversations to report.

WELDING INSPECTION REPORT

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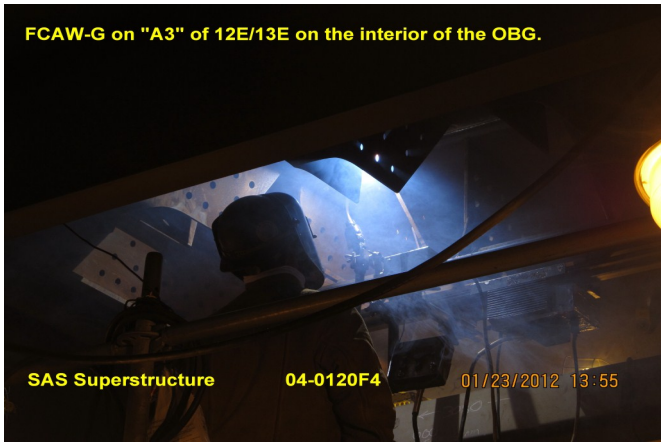

Comments

This report is for the purpose of determining conformance with the contract documents and is not for the purpose of making repair or fit for purpose recommendations. Should you require recommendations concerning repairs or remedial efforts please contact Nina Choy 510-385-5910 , who represents the Office of Structural Materials for your project.

Inspected By:	Frey,Doug	Quality Assurance Inspector
Reviewed By:	Levell,Bill	QA Reviewer